

## SECTION IV

## COST AND PRICING

## A. INTRODUCTION

Cost is a primary evaluation criterion. Because the 911 Program is generally a reimbursement program for participating local agencies the **General System Requirements** are used more as a baseline to determine the cost element of a typical system and are contained in this section. Evaluation of cost will be based on the lowest total estimated net cost to the State as calculated according to the methodology in this section. It includes, but is not limited to, consideration of one-time costs, continuing costs, rate escalations, and adjustments as they specifically relate to the products and services to be obtained.

## B. PRICING

All hardware and software contract prices must be a firm fixed percentage of a price that is listed in the manufacturer's commercial price list, or the Manufacturer's Suggested Retail Price (MSRP) list. All net prices are to be based on commercial price lists for goods and services sold commercially or, in the instance of personal services, prices for services customarily provided by the Contractor with personnel regularly employed solely for the purpose of commercially providing such services in normal business operations. Any price lists submitted for this contract shall contain no alterations whatever from those which are commercially offered. Price lists that are published for government pricing purposes only, such as GSA prices, or are price lists establishing prices only for the purposes of a bid shall be rejected.

Price lists that are in a catalog purporting to be a list price or MSRP shall be the manufacturer's suggested retail price without any additional mark-up or discount. Different discounts from the MSRP may be offered for specific groups of product according to the Cost Table Instructions.

The Price List is the complete list of equipment, software and labor that the Contractor wishes to offer for sale to PSAPs. The Price List contains the MSRP price and the associated cost for installation (Install Price) and monthly maintenance rate for years 2 through 5 for each item. Discount off MSRP shall not be listed in the Price List. Discount off MSRP must be listed in the **Cost Table** for all products listed in the Price Table. The Contractor must list at the bottom of the Cost Table the applicable discount off MSRP for all products listed in the Price List.

Contractors must provide the following information in their Price List: Item Number (Should match item number in Cost Table), Description, Part Number, MSRP Price, Install Fee and Monthly Maintenance rates for Years 2-5.

Bids restricting the State's ability to award contracts for products and services as described may be evaluated as non-responsive if the restrictions preclude the competition of bidders responding as requested. Bundling of groups or items may have this effect on a bid.

## C. COST DEFINITIONS

1. Continuing Costs

Continuing costs are those costs that are projected to be paid by the State to the Contractor(s) on a monthly basis. Any discounts offered shall be reflected in the monthly rates quoted herein. In addition, for evaluation purposes, continuing costs include any cost adjustments that are applied on a monthly basis (e.g., price escalations and equipment failure costs). For purposes of this contract, only the continuing cost associated with maintenance services will be funded by the 9-1-1 Program, unless otherwise specified.

2. One-time Costs

One-time costs are those costs paid by the State for material and services necessary for the operational implementation of the products. For purposes of this contract, payment for installation and materials by

the 9-1-1 Program only after the system is accepted by the PSAP and a correct invoice is received, whichever occurs later.

- a. Installation costs are all the one-time charges for personnel and supplies necessary to effect an operational system or piece of equipment. The installation costs are fixed by the provisions of this agreement in the Price List.
- b. No direct expenses such as travels, meals or lodging shall be considered nor paid for under this agreement.

#### **D. PRICE ESCALATIONS AND DECLINES**

Price escalations will take affect on the first payment after the escalation is approved by the Department of General Services. Price declines shall be effective immediately upon any public notification of the decline.

##### **1. Price Escalation**

Prices for hardware, software and maintenance shall be allowed to escalate with the Manufacturer's Suggested Retail Price list; however, only one price escalation shall be allowed within any twelve (12) month period after the Final Proposal due date for this Agreement for each MSRP for hardware, software, maintenance and labor. Note: The installation fee is considered labor for rate escalation purposes but is considered a flat fee for cost evaluation purposes.

No sooner than within 30 days of the 2nd anniversary of the award of the contract, a contractor may petition to have the hourly rates amended to reflect increases in the rates in the general market place for the hourly classifications. Proof of the increases shall be based on the Producer Price Index Federal SIC classification for the particular rate the contractor wishes to increase. The contractor must provide the SIC code rates at the time of contract award and current rate information to calculate the percent of increase. The amount of contract rate increase will be calculated as follows:

The State will use the contractor provided escalation percentage to determine the escalated contract rate(s) for the additional year(s). This will be calculated by using the current contract rate(s) multiplied by the escalation percentage, then adding that result to the current rate(s) to determine the new contract rate(s).

(Example Current rate is \$100.00 x 10% = \$10.00 New rate is \$100.00 + \$10.00 or \$110.00)

An Amendment will then be issued to the MSA with the new rates.

##### **2. Price Declines Applicable to Manufacturers**

Prices quoted shall be maximum for the contract period subject to any price escalation provisions. However, should a price decline be announced by the manufacture after contract award, but prior to the State taking title to the equipment it shall be passed on in total to the State of California by the manufacturer. Any interest, finance, or other charges based on the contract price will be recomputed using the original bid rates and the differences will also be passed to the State in total.

##### **3. Price Declines Applicable to Third Party Contractors**

Prices quoted shall be the maximum for the contract period subject to any price escalation provisions. However, should a price decline be announced by the manufacturer after contract award, but prior to a third party contractor taking title to the equipment; and should third party contractor be the recipient of this manufacturer's price decline; it shall be passed on in total to the State of California by the third party contractor. Any interest, finance, or other charges based on the contract price will be recomputed using the original bid rates and the differences will also be passed to the State in total.

#### **E. MAINTENANCE RATES**

Maintenance rates shall be firm for the contract period subject to changes in commercial maintenance rate schedule charged the general public from the Contractor's Commercial Price List. Maintenance prices shall be allowed to escalate with the Price List as defined above; however, only one price escalation shall be allowed within any twelve (12) month period after the Final Proposal due date for this Agreement.

Maintenance plans and associated rates are to be offered that meet the maintenance requirements under Section II, Contract Performance. Maintenance rates shall pay for all labor associated with onsite and remote/onsite maintenance by Contractor's personnel. Maintenance does not cover parts replacement, which, when necessary, will be purchased after the warranty period on an as-needed basis. As-needed parts will be supplied at the rates specified in the price tables. Contractors may offer alternative maintenance plans that provided both labor time and materials. Time and materials only type plans will utilize the hourly rates and prices for goods as stated on the MSRP.

Maintenance under warranty is not listed on the MSRP and shall have no associated price.

**F. INSTALLATION COSTS**

Costs associated with the installation of any piece of equipment must appear on the Price List. Equipment that has no associated installation cost in the Price List will be installed at no charge to the State.

**G. TRAINING COSTS .**

The minimum requirements stated herein for training shall be provided at the cost listed in the Cost Tables on a per supervisor/system administrator and call taker basis. It is expected that additional training for optional features will be listed in the Contractor's Price List. Training requirements are specified in detail in Section 2.

**H. EXPEDITE FEES**

The Price List shall show any expedite fees for expedited delivery and installation.

**I. INSTALLATION ASSUMPTIONS FOR COSTING PURPOSES**

The State has developed, for cost evaluation purposes only, an estimated delivery schedule which is based upon the following assumptions:

1. Total maximum life of the contract will be (5) years plus a maintenance period commiserate with the manufacturer's stated useful life of the equipment.
2. Equipment is to be ordered in the first three (3) years of the contract or during the period of contract extension.
3. The PSAP requires on-site or on-site/remote maintenance coverage a minimum of 24 hours per day, seven days per week per the requirements stipulated herein under maintenance.

**J. EVALUATED AND NON-EVALUATED ITEMS**

The Contractor should bid not only those items necessary to build the sample installation below but also submit pricing for all other equipment/software/service options available to a PSAP Agency. This should include all items and services offered by contractor for the purpose of answering 9-1-1 calls.

The State Department of General Services, Telecommunications Division, will establish Ordering Procedures that are published after award to notify all potential users of the prices, terms and conditions of the Contract. The Cost Tables following are organized to evaluate only the prices associated with the items in the sample configurations of the General System Requirements; however, the other items in the commercial price list and MSRP, for which prices are included, will be consulted by client Agencies to determine whether a contractor has optional product and services available. Pricing the other items such as package deals, extended warranties, upgraded maintenance, etc., allows client Agencies the options in equipment and services that the Cost Tables do not list but will be in some demand. Price Lists for items *not covered* by the Cost Tables are considered optional items and may be submitted for consideration to be included in the Contract. Any such list with optional items submitted will only be included as determined to be in the best interest of the State and PSAP participants. Only those Price Lists submitted for consideration and accepted will be part of the agreement.

**K. EQUIPMENT REQUIREMENTS**

For evaluation purposes, the cost of all components needed to achieve the desired configuration of an item must be included. If an item is described in the product description, or other bidder provided description, as required for a listed item to operate properly and is omitted from the Cost Table pricing, it will be interpreted to mean that the item will be provided with the listed item by the bidder **at no cost** to the ordering Agency.

**L. GEOGRAPHIC AREAS**

The State has been separated into five (5) separate areas (see attached map). The State understands that some companies do not have the resources to sell and service products in every geographic area of the State. Therefore, bidders will bid only for those areas where they can meet the requirements of this RFP. Bidders will be allowed to bid different prices for maintenance, training and labor services for different geographic regions. Equipment prices cannot differ and must be the same throughout the state in all geographic regions.

**M. SAMPLE CONFIGURATION EVALUATION INFORMATION**

Contractors shall price a system in accordance with the General System Requirements for one five (5) position system. After award of contracts, the price quote provided by the Contractors for the five (5) position sample installation shall require only additions or subtractions from total item quantities to obtain a final price quote for all 2 to 10 position systems with equivalent features and options. Most California PSAPs range in size from 2-10 Call Taker positions. Therefore, the sample installation below closely approximates the configuration of a majority of the PSAPs found in the State. After award of contracts, the price quote provided by the Contractors for the sample installations shall require only additions or subtractions from total item quantities to obtain a final price quote for each PSAP installation with equivalent features and options.

## **GENERAL SYSTEM REQUIREMENTS**

**1. NENA STANDARDS**

Contractor shall detail any exceptions, of which they have knowledge, to the **National Emergency Number Association Generic Standards for E9-1-1 PSAP Equipment**, NENA Technical Reference NENA-04-001 Issue 1, dated June 20, 1996 related to the Contractors proposed system. Contractor shall cite its knowledge of proposed system compliance to these specifications. A copy of these specifications can be obtained at: [http://www.nena.org/9-1-1\\_Standards\\_Development/Standards\\_PDF/NENA%2004-001.pdf](http://www.nena.org/9-1-1_Standards_Development/Standards_PDF/NENA%2004-001.pdf)

A copy of Adobe Acrobat reader, provided free at the Nena Website, is necessary to read this document.

**2. COMMONLY AVAILABLE COMPONENTS**

9-1-1 Program recognizes the uniqueness of core components in the 9-1-1 equipment. However, 9-1-1 Program expects the successful Contractor to utilize industry standard and readily available components for such items as follows: Telephone Handsets, Telephone Cords, Computer Keyboards, Computer Monitors, Computers and Printers. Contractor will provide a list of off-the-shelf components that would be used in a sample configuration. After initial purchase from a contractor, all commonly available components can be replaced at the risk and discretion of the PSAP. With the written consent of the Contractor, such consent not to be unreasonably withheld, the Ordering Agency may replace commonly available components that meet or exceed the manufacturers specifications. Such replacements of Contractor's equipment will be at the Ordering Agency's expense, and should be allowed by the Contractor if in the Contractor's opinion no safety hazard or system degradation is thereby created. The Ordering Agency shall assume full liability for any damages and/or degradation of Contractor's remaining equipment or software caused by such replacements. Maintenance agreements for replaced items will be separate to maintenance for all contractor provided equipment. However,

during the initial purchase of a 9-1-1 system the purchase of a computer monitor from the contractor or a third party source shall be at the discretion of the State or PSAP agency.

### 3. TRAINING

The Contractor shall provide training as specified in Section 2.

### 4. LOGGING RECORDER INTERFACE

An RJ21X Block shall be provided on the Contractor's Main Distribution Frame in the 9-1-1 Equipment Room or a location mutually agreed to by the Contractor and the Logging Recorder Contractor, with termination of all Voice Circuits for distribution to a logging recorder at the PSAP.

## USER FEATURES

For each user feature the Contractor will detail the capabilities of the proposed system to meet or exceed the specification. **For systems that do not employ a standard system configuration, Contractor must document to the State's satisfaction that the proposed system's functionality provides the mandatory features in such a manner that the abilities of the call taker to perform their job is not degraded.** A Contractor who fails to detail the capabilities of the proposed system to meet the functional requirement of each specification to the State's satisfaction shall be deemed insufficient to determine the capabilities for that feature. An answer such as "Meets specification" by the Contractor provides insufficient information to RFP evaluators to determine if a specification has been met. Contractor shall detail the capabilities of the proposed system in an attachment that contains only a reference to each specification item number and name (For Example: 3. Flash Transfer: Contractor's Response: Our system provides...). Bidders are not to include original user feature bid language in their response. This detailed statement is to be submitted with the forms in Section V.

### 1. CALLER I.D. REQUIREMENT

Proposed system shall be capable of displaying Caller ID on Centrex and 1MB lines, analog loop start telephone lines, when not blocked by the caller.

Proposed system shall be capable of permanently capturing on paper or database the Caller ID of previous callers.

### 2. COMPLETE CALL PROGRESS DETECTION REQUIREMENT

Proposed system shall be capable of call progress detection and notification throughout the life of the call. The required call progress states are: Idle (No call active), Ringing (Incoming call), Dial Tone, Stutter Dial Tone, Ring Back, Busy, Connected and Disconnected Call. These features can be audible and/or visual indicators, on the telephone and/or workstation, generated by the 9-1-1 CPE or Central Office equipment.

### 3. FLASH TRANSFER

Proposed system shall be capable of transmitting a flash hook to the central office to obtain secondary dial tone for the purpose of transferring the caller or conferencing a third party.

### 4. CONFERENCING

Proposed system shall be capable of establishing a supervised conference consisting of three (3) or more internal and/or external parties (Including originator).

### 5. DISTINCTIVE RINGING

Proposed system shall be capable of audible indication of the type of incoming call by using distinctive ring tones for different trunk groups. There shall be a minimum of two (2) distinctive ring tones, assignable by trunk or trunk group.

### 6. CALL QUEUING

Proposed system shall be capable of displaying queue status for up to 3 different trunk groups.

Each queue indicator shall indicate via visual and audible indicators that calls are waiting to be answered. Alternatively, the call taker can view the status of individual trunks. Each trunk will display the status of calls waiting to be answered, calls on hold and calls answered.

## **7. LAST STORED NUMBER REDIAL**

Proposed system shall be capable of last number redial via one button/feature activation at the discretion of the call taker.

## **8. SPEED DIAL**

- Proposed system shall be capable of one button/feature speed dialing to place calls or transfers callers.
- Proposed system shall be capable of access to speed dialing via input of 2 or 3 digit speed dial codes or the activation of computer CRT drop down speed dial lists that can activate 100 or more pre-programmed speed dial numbers.
- Speed-Dial numbers shall be programmable up to 32 digits.
- Speed-Dial numbers shall be user-programmable, under supervisory control.

## **9. VOICE TRANSFER**

The answering position instruments shall be programmable to provide one-button/feature transfer of callers to other emergency response agencies, based on the incoming ESN. The system shall provide up to sixteen (16) one-button/feature tandem transfers. Activation of the one-button/feature will dial a tandem programmed speed dial code to transfer the caller to a particular agency. For this feature, selection of the agency is manually chosen by the call taker, not by the ESNs listed in the ALI record.

## **10. RING VOLUME**

Proposed system shall be capable of ring volume adjustment by the call taker. Deactivation of the ringer by the call taker shall not be supported.

## **11. TRANSMIT MUTE**

Proposed system shall be capable of muting Call Taker's voice transmission while continuing to monitor caller on an active call by activating one-button/feature.

## **12. RELEASE**

Proposed system shall be capable of releasing a line by activating one-button/feature regardless of the status of the handset.

## **13. RADIO BROADCAST (OPTION)**

Proposed system should be capable of using the telephone instrument handset/headset with radio system under the control of the answering position equipment, and the ability to use the radio system headset with the telephone instrument under control of the radio system control.

## **14. INTEGRATED VOICE RECORDING (INSTANT RECALL RECORDER)**

Proposed system shall be capable of recording 2-way voice communication of telephone calls at each position for the purpose of future playback by the call taker. Playback shall be accessible on screen via the IWS GUI (Graphical User Interface).

Call records such as date and time of call shall be associated with each archived telephone call. The system shall have programmable settings to determine how long voice files will be archived so as to conserve disk space. However, it will be possible to save particular recordings indefinitely if necessary. Recorder shall be capable of storing a minimum 30 minutes of telephone conversation

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**15. TELECOMMUNICATIONS DEVICE FOR THE DEAF (TDD/TTY)**

Each call taker position shall be able to automatically detect TDD/TTY baudot and ASCII calls in progress.

Each Call Taker Position shall have the ability to receive and decode ASCII/Baudot calls in compliance with current ADA regulations without the need for additional equipment at each IWS.

The TDD/TTY capability must be available to all lines that appear at each position, i.e., E-9-1-1, seven-digit emergency, administrative and ringdown.

To avoid the unnecessary delays in handling TDD/TTY calls, the Call Taker position must have the ability to receive baudot/ASCII characters on the CRT display and scroll the text information. The TDD/TTY window must have the ability to display at least 20 preprogrammed TDD/TTY messages that the call taker can transmit to the caller with a single click of the mouse.

The system must provide the ability to print TDD/TTY messages to the system call records printer. Each TDD/TTY call must be clearly labeled as a TDD/TTY Call to allow for quick reference when reviewing records.

TDD/TTYs must be capable of Voice Carry Over And Hearing Carry Over (VCO/HCO) for dual party TDD/TTY relay systems, whereby a person may use his or her own voice to speak directly to the other party through the relay and have the operator relay text in the other direction.

**16. TELEPHONE SETS**

Telephone sets shall have the following features:

- Hold
- Dial
- Re-Dial
- Release
- Transfer
- Conference
- Speed Dial
- ANI display (Separate Display is Allowed)
- 4 Line appearances or more
- 10 Multi-Function programmable keys or more, programmed as telephone line appearance or a feature of the telephone set
- Headset/Handset Interface
- Volume control for Headset/Handset, ringer
- Call status indication (Ringing, answered or on hold)
- For each telephone set available from the manufacture, detail the line and feature button combinations that are available from the manufacturer.

**SYSTEM FEATURES****1. ANI/ALI DISPLAY**

- The system shall have the ability to display ANI/ALI data associated with each 9-1-1 call on computer display or phone set
- The ANI/ALI display at each position shall provide the ability for the operator to review at least the last ten ANI/ALI data records for calls that were answered by the operator.

**2. SUPPLEMENTAL ALI DATA (Optional)**

The software application should support a local database that provides the call-taker with immediate access to stored information about a specific location. This information could include building access, hazard warnings, hazardous material information, structural plans, evacuation instructions, site photos. The system should not

force a call-taker to read through extensive information in order to find the required information, it should automatically search for existing information based on a particular location and incident type and prompt the call-taker that there is data available for reviewing.

### **3. ALI ERROR REPORTING**

The software application shall provide the Call Taker the ability to systematically capture erroneous ALI information. The error report shall capture all call detail information on paper or electronic file for later review and editing.

### **4. ALI CONTROLLER**

- A request to the database shall be made as soon as caller ANI is detected. Contractors shall define the standard time this query is set for and the min/max parameters.
- The ALI database interface shall accept ALI retrieval requests from the 9-1-1 trunk interface and send them in the proper format to the host ALI computer.
- If the received ALI is unclear or incomplete, a call taker must be able to command the system to repeat the request for ALI from the 9-1-1 database.
- The ALI controller must be capable of retrieving ALI data through a Frame Relay or X.25 circuit. The Frame Relay/X.25 router equipment is supplied by the local telephone service provider. The equipment provides an asynchronous EIA/TIA-232 data port.
- The capability for automatic or manual ALI retrieval on 1MB or Centrex lines when caller ID is presented with the call on designated telephone lines.

### **5. NETWORK CONNECTION REQUIREMENTS**

Contractors installing 9-1-1 systems will be required to connect to the ALI databases of Pacific Bell or Verizon. Shown below is a basic description of the ALI network configuration for each telephone company. When installing 9-1-1 systems, it will be the responsibility of each Contractor to contact the local telephone company to obtain specific connection requirements.

#### **6. PACIFIC BELL NETWORK CONNECTIONS**

- ALI Database Connection - Contractors will need to connect their equipment to a telephone company supplied router that uses a frame relay circuit to request ALI from the ALISA database.
- Data Collection Service Connection - Contractors will need to connect the 9-1-1 system to a telephone company provided frame relay router to send ANI/ALI information to a remote data collection service.
- ALI Dial Backup Connection - The contractor will need to provide a 33.3 modem connected to a telephone company provided analog measured business or Centrex line. The modem will have dial out capability only for the purpose of backing up the primary ALI circuit. Upon failure of the primary ALI circuit the frame relay router will automatically reconnect to the ALI database until the primary ALI circuit is reestablished.
- If additional technical information is necessary please contact George Hardin of DGS, Telecommunications Division at 916-657-9152 or [george.hardin@dgs.ca.gov](mailto:george.hardin@dgs.ca.gov).

#### **7. VERIZON NETWORK CONNECTIONS**

- ALI Database Connection - Contractors will need to provide an RS-232/EIA-232 cable to connect their equipment to a telephone company supplied Packet Assembler/Disassembler (PAD) that uses an X.25 circuit to request ALI from the ALISA database.
- Data Collection Service Connection - Contractors will need to connect the 9-1-1 system to a telephone company supplied frame relay router to send ANI/ALI information to a remote data collection service.
- ALI Dial Backup Connection - The contractor will need to provide a 33.3 modem connected to a telephone company provided analog measured business or Centrex line. The modem will have dial out capability only for the purpose of backing up the primary ALI circuit. Upon failure of the primary ALI circuit the modem will automatically reconnect to the ALI database until the primary ALI circuit is reestablished. If additional



technical information is necessary please contact George Hardin of DGS, Telecommunications Division at 916-657-9152 or [george.hardin@dgs.ca.gov](mailto:george.hardin@dgs.ca.gov) .

## **8. ABANDONED CALL DETAIL**

In the event the system detects a 9-1-1 calling party hangs up before a Call Taker answers the call, the system shall identify in the System Call Status Window the abandoned call ANI and ALI Information. The system shall automatically place the calling party 10-digit ANI into the Last Number Redial of the associated Call Taker answering position which will provide one-step call back to the abandoned call number.

## **9. COMPUTER AIDED DISPATCH ANI/ALI OUTPUT**

- Proposed system shall provide an interface capable of sending to a Computer Aided Dispatch system the information normally displayed with an Enhanced 9-1-1 call.

## **10. CENTRAL PROCESSING UNIT (CPU)**

The Intelligent Workstations provided by the Contractor shall be the current high-end market Computer(s) at time of order. Computers offered by the Contractor shall be chosen based upon reliability, interoperability, and by Manufacturers recommended Make and Model best suited to the Manufacturer's software. The following specifications are to be used unless exceeded by the manufacturers recommended specification. As computer component technology progresses during the period of this contract the Contractor shall continue to use the manufacturers recommended specifications as the minimum specification for equipment and software. As a minimum the IWS should have the following specifications, or better:

- 733-MHz Pentium III
- 128-MHz SDRAM
- Hard Drive - Minimum of 20 GB
- Graphics Memory, 16MB or better
- 12X (minimum speed) CD Read/Write and 3.5" Diskette Drive

## **11. KEYBOARD**

101-key AT Enhanced with PS/2 Connector. Optionally, the Contractor shall offer on supplemental price list other keyboard options that provide different ergonomic designs and/or features.

## **12. MOUSE**

Two-Button with PS/2 Connector. Optionally, the Contractor shall offer on supplemental price list other mouse options that provide different ergonomic designs and/or features.

## **13. MONITOR**

Monitor must meet these minimums:

- 17" Cathode Ray Tube, 15" viewable
- .25mm dot pitch
- 1280 x 1024 @ 85 Hz
- Anti-glare/anti-static glass
- MPR-II Compliant to insure low monitor emission levels
- Energy Star Compliant to reduce power consumption during inactive periods
- Contractor may submit other monitors on supplemental price list for inclusion in contract.

## **14. UNINTERRUPTIBLE POWER SUPPLY**

Contractor will provide with each 9-1-1 system adequate power failure backup systems and power conditioning systems to insure that failures, spikes and brownouts from any source do not damage or shutdown any components of the 9-1-1 system. The UPS is not intended to maintain power to the equipment for extended periods of time. The UPS is intended to provide power during the interval between when commercial power fails and the PSAPs own generators begin providing back-up power. In those cases where the PSAP already

has a UPS in place capable of handling the power requirements of the 9-1-1 system the Contractor will not install an additional UPS system. In the event that the PSAP does not have an adequate UPS system the Contractor will provide the following:

One UPS will be provided capable of maintaining the backroom ANI/ALI server and ancillary equipment for 15 minutes under normal load conditions. The UPS will also condition the power to prevent harmful power spikes and brownouts from damaging the backroom and Call Taker position equipment.

One UPS per Call Taker position capable of maintaining the equipment for 15 minutes under normal load conditions. The UPS will also condition the power to prevent harmful power spikes and brownouts from damaging the equipment.

## **15. POWER AND REDUNDANCY**

Due to the critical nature of 9-1-1, bidders must specify in detail how their product offering will perform reliably in the 9-1-1 environment. Detail the capabilities of the proposed system to continue functioning should the failure of various components occur. Detail those components that provide redundancy and those components that, upon failure, would result in a total loss of system functionality. As evidence of reliability please include mean-time-before-failure statistics, if available, from the manufacturer for the various system components.

## **16. LOCAL MAINTENANCE**

A maintenance terminal interface shall provide the following interaction with the E9-1-1 controller:

- Diagnostic mode: To display all event, diagnostic, and error messages as they occur.
- Maintenance mode: To program and configure the E9-1-1 controller (program interface parameters, assign telephone numbers, reset alarms, generate reports, select options).
- Maintenance mode shall be password protected to ensure system security.
- Contractor shall provide the option (On supplemental price lists) of a dedicated Maintenance Terminal and detail the effect on Remote Maintenance, if any.

## **17. MAINTENANCE**

The Contractor will be required to provide maintenance as specified in Section 2. If a contractor chooses to respond to notification of major/minor failure with a REMOTE/ON-SITE RESPONSE the contractor will detail in writing (when the information is available) the capability of a factory trained technician to access the system remotely and provide the following:

- Full diagnostic access to all major components of the 9-1-1 system
- Capability to perform software repairs
- Capability to disable or enable systems ports to bypass failed ports
- Contractor will provide a list of the most frequently failed components and the success rate percentage history of remote repairs for these components
- Access accumulated statistics on system performance such as error messages, power failures, etc.
- Provide the ability and types of software that can be remotely updated/replaced
- For security concerns, access to the system must be password protected

## **18. STATION MESSAGE DETAIL RECORD (SMDR)**

An automatic call detail record shall be printed by the system every time a call is released. The information contained in each SMDR includes:

- The caller's ANI and ALI
- Position of agent that answered the call
- Transferred destination
- Date, times of the various connect and disconnect events, and other particulars relating to a call

- The ability to replace the SMDR printer with an IBM-compatible PC in order to automatically update a database of call detail records shall be provided as an option.
- In the event of a printer failure an alarm will automatically notify the operator that a call is stored in the printer spool and the printer needs attention.
- The 9-1-1 system will buffer all subsequent 9-1-1 call information and resume printing buffered call information once printer operation is restored

## **19. REMOTE DATA COLLECTION SERVICE**

Call record data is collected from each PSAP Agency's ALI controller via an X.25 or Frame Relay circuit by two remote data collection services. The information is then collated into simple to understand statistics that can be viewed by the PSAP Agencies via the Internet. The following information must be supplied by the Contractor 9-1-1 equipment to the remote data collection service using the appropriate circuitry. Circuits for this feature are provided by the local 9-1-1 telephone service provider. Note: The same circuits are also used to provide access to the 9-1-1 database for ALI retrieval.

- The time the trunk or line was seized and the time the trunk or line was released. The difference in these two times is considered the Call Duration and is calculated by the remote data site. Alternately, it is acceptable for a controller to provide the already calculated call duration.
- A timestamp is placed on the call when the call detail data is received from the network. This is the date and time used for all reports. It is on the order of 1-3 seconds after the call completes which occurs when the trunk is released. It has been observed that a number of PSAP ALI controller date and time stamps are incorrect. Therefore, the remote data collection service will continue to use the time the call was received to timestamp call detail records.
- The time the phone started ringing and the time the call was either answered or abandoned. The "ring time" is the time from the time it starts ringing until it is answered or abandoned and is calculated by the remote data collection service. Alternately, it is acceptable for a controller to provide the already calculated length of ring time instead of the time it started ringing.
- The trunk or line identifier the call came in on.
- The position identifier that answered the call.
- An indicator as to whether or not the call was abandoned.
- An indicator as to whether or not the call was placed using a TDD device.
- The standard ALI (address) information returned by the 9-1-1 database
- Something from the controller (most likely a time stamp) at least every hour so the remote data collection service will know if the controller is still operating.
- It is not necessary for Contractors to reformat the ANI/ALI information before it is sent to the remote data collection service.
- If additional technical information is necessary please contact George Hardin of DGS, Telecommunications Division at 916-657-9152 or [george.hardin@dgs.ca.gov](mailto:george.hardin@dgs.ca.gov)

## **20. MULTIPLE LINES/WORKSTATION REQUIREMENT**

- Contractor shall detail the expansion capabilities of the system for additional telephone lines and stations.
- The design shall be modular to allow for future expansion beyond present requirements.
- Proposed system shall be capable of connection to at least 20 or more CAMA (E9-1-1) trunks.
- Proposed system shall be capable of connection to at least 20 or more 1MB or Centrex trunks.
- Proposed system shall be capable of connection to at least 4 or more ring-down trunks, such as those to answer a front door intercom or a dedicated voice connection to remote locations.
- Proposed system shall be capable of supporting at least 10 Intelligent Workstations.

## **21. TRUNK AND LINE INTERFACES**

It is anticipated that most PSAP installations will require connection to the following line side technologies:

- Enhanced 9-1-1 Trunks

- Ring down Circuits (Tip and Ring)
- Centrex and 1MB lines with Caller ID (Where available). These are analog, loop start telephone lines.

## **22. MOVES, ADDS AND CHANGES (MACs)**

The Contractor shall also provide routine moves, adds and changes as requested by the PSAP. Moves, adds and changes refers to changes in system programming to facilitate PSAP operations, moving equipment from one location to another in the same facility and adding additional equipment to completed installations. When performing MACs, the Contractor will not count travel time to and from the PSAP or pre-preparation time, only the time spent actually spent performing the MACs. There shall be a one (1) hour minimum charge for all MACs. For those MACs that must be performed routinely, such as adding or deleting new Call Takers, changing speed dial numbers, Etc., the Contractor shall provide training to the PSAP System Administrator to perform these MACs.

All costs for MACs will be directly billed and paid by the PSAP Agency. If the contractor is asked to move and reinstall equipment at a different facility, the MAC rate established by this contract will apply to similar activities performed such as those described above, while the cost for other services not normally associated with a same facility MAC, such as moving van equipment and personnel, will be negotiated on a case-by-case basis for each relocation.

## **23. CABLING**

Proposed system shall be cabled according to the Manufacture's specification to enable equipment to operate as intended with no interference to any other PSAP system. All building and electrical codes applicable at the location of the PSAP to telephone wiring shall be complied with.

Cabling in the backroom equipment and the operations room shall be installed in a neat and professional manner. Cabling should be run in conduit or cable trays through ceilings. Cabling shall be run in conduit within walls, and within conduit or Panduit on walls where interior access is not available. Cabling installed under work surfaces, in modular console systems, or similar shall be run in provided wiring channels, with secured wire looms, or Panduit. Connectors shall be secured to their termination points by appropriate screws, cable ties, Velcro, or other fastening material.

PSAP will be responsible for facility modifications such as installation of plywood in the demarcation point, installation of conduit and installation of electrical circuits necessary to install a new 9-1-1 system.

## **24. TIME SYNCHRONIZATION**

Proposed system shall be capable of being time synchronized to an external source so time records match those of other devices, such as CAD and logging recorders, when all devices are synchronized to a single time source.

## **25. WIRELESS ALI – FCC 94-102 - PHASE I AND PHASE II**

All intelligent workstations, controllers, and ancillary systems shall accommodate Wireless E9-1-1 requirements as described in Federal Communications Commission (FCC) Report and Order 94-102. All components shall interface with existing E9-1-1 networks and display the appropriate Automatic Number Identification (ANI) and Automatic Location Identification (ALI) identified in Phase I and Phase II of the FCC Order, as specified in Telecommunications Industry Association standards J STD-034 (for Phase I) and J STD-036 (for Phase II). The display of information, as required by FCC 94-102, shall accommodate both Call-Path Associated Signaling (CAS) and Non Call-Path Associated Signaling (NCAS) methodologies as defined in those standards.

## **26. GEOGRAPHICAL INFORMATION SYSTEM (OPTIONAL)**

Due to the requirements for Phase II please provide details regarding your systems ability to show the location of a 9-1-1 caller using a Contractor or third party Geographical Information System (GIS). Define how your system will provide and integrate this feature. Please provide on supplemental price list all GIS software/hardware that you offer.

- For a CPE based system, provide details regarding hardware and software necessary and available now to meet the needs for Phase II and the anticipated cost for a turnkey solution.

## **SAMPLE INSTALLATION for EVALUATION PURPOSES**

The Contractor will bid a five (5) Call Taker position sample installation, with the understanding that after award of contracts, the price quote provided by the Contractors for the sample installation shall require only additions or subtractions from total item quantities to obtain a final price quote for all 2-10 position PSAP installation with equivalent features and options. . It is understood that there may be items required for a ten (10) position system that may not be required for a five (5) position system. Features for this sample installation shall include those listed below and also those listed in this section under User and System Features. Other requirements, including, but not limited to maintenance and training will be found in this and other sections and shall be included in the cost for the sample installation. The following list of features describes the minimum set of features that the Contractor will quote prices based on their MSARP and commercial price lists:

5 Call Taker Positions, each with the following features

1. Full Computer Telephony
2. 17" CRT Monitor
3. Mouse
4. Standard Keyboard
5. Keypad Dialer (If no phone set)
6. Phone set (Only if necessary for computer telephony integration)
7. Keyboard Arbitrator
8. Instant Recall Recorder
9. Position UPS (15 minutes)
10. TDD/TTY

Additional Requirements:

11. One UPS serving all backroom equipment (15 Minutes)
12. Dot Matrix Printer For ANI/ALI Printing
13. Training for 36 Call Takers , 6 Supervisors
14. 5 Enhanced CAMA Trunks
15. 10 Centrex/1MB Administrative Lines, with Caller ID (If available)
16. Capability for third party Contractor to remotely collect real time ANI/ALI/Call Detail Data via Frame Relay connection
17. Punchdown block at demarcation point for connection to PSAP provided Logging Recorder
18. For cabling, assume a 100 foot run from Demarcation Point to Intelligent Workstations with no obstructions
19. ANI/ALI output interface to PSAP provided CAD
20. 4 hours per year (20 hours total), Moves, adds and changes, no trip charges allowed. Vendor will assume that the requested MACs will be to change system programming to facilitate PSAP operations, move equipment from one location to another in the same facility and adding additional equipment to completed installations. (see MACs in Section II, A, 11)
21. One (1) year parts and labor warranty, four (4) years maintenance service

## **COST TABLE INSTRUCTIONS**

The Contractor shall provide a typewritten response in a cost table showing the prices for each item required to supply a turn-key system that meets the 5 position sample installation. This response must include the equipment, software and labor as it is represented on the MSRP Price List. At a minimum the information on the Cost Tables example below must be provided. Additional pages may be required to list all the manufacturers and discounts. The Cost Tables must provide **net price to the state**, with any discount applied, which is based on the MSRP and Commercial Price Lists provided with the bid, for each geographic location

indicated on the table. In the event of a discrepancy between a Cost Table price and the discounted price from the MSRP, the MSRP discounted price shall prevail.

All necessary equipment to effect a complete turn-key system as described by the sample installation must be quoted. Note that it may require more than one Manufacturer's Price List to complete a single table; however, only one discount is allowed per manufacturer per product group. The types of product are grouped for purposes of this RFP, and any contract resulting, as follows: 1) personal computers (desktop), 2) monitors, 3) servers, 4) add-ons, peripherals and accessories (eg. modems, cables, memory upgrades, ethernet adapters, keyboards, mouse, etc.), 5) printers, 6) controllers, 7) routers, 8) bridges, hubs and associated options, 9) PBXs and key system components, 10) software, 11) telephone sets, and 12) uninterruptible power supplies. All product quoted must be grouped for discount purposes as stated herein.

The bidder must indicate on the Cost Table the **geographic area** being bid. Failure to indicate a geographic area is considered a material deviation. Each geographic area being bid should be accompanied by a list of service locations that provide the required service levels to any PSAP in that area (A form is provided in the forms section for this purpose.).

The cost table has been broken down into five (5) major subsystems (or categories) of the 9-1-1 system. Bids must price all five of these categories to be responsive to the RFP requirements. These five categories are described as:

- 1. The Intelligent Workstation (IWS) and Associated Operations Room (Dispatch Center) Equipment.**
- 2. The Enhanced 9-1-1 Controller and Associated Backroom Equipment.**
- 3. Miscellaneous Equipment And Materials:** This category will be used to group items such as cables, plugs, connectors, screws, bracing, punch down blocks, etc. For the purposes of this Request for Proposal the Contractor will provide a single price for miscellaneous equipment and materials, the cost of which will not exceed one percent (1%) the cost of all equipment being provided. These items may be represented individually on the MSRP Price List, but if they do not represent more than 1% of the sample system total are not required to be individually priced for RFP evaluation purposes.
- 4. Labor:** This category will be used to list the cost of various types of labor including, but not limited to, project management, engineering, design, programming, and moves, adds and changes. Hourly rates quoted must be extended by the number of hours required in the sample installation.
- 5. Training of call takers and system administrators/supervisors.** Training costs must be presented as a cost per operator and must be inclusive of any costs for operator and reference manuals. Prices for training are a contract requirement and the Price List must show separately the training costs for call takers and supervisors/system administrators. Costs for all training materials shall be as specified in the Cost Table.

Each of the above five categories must be further broken down by the Contractor into the individual items necessary to complete a particular category. For example, under the category Intelligent Workstation (IWS), the Contractor will list individually the components necessary for a complete IWS subsystem including, but not limited to, the monitor, keyboard, mouse, Central Processing Unit, software, telephone, telephone interface card, key pad adjunct, voice integration card, local area network interface card, digital to analog converter, Universal Power Supply, Etc. Bids for bundled items will not be accepted, the exception being miscellaneous parts and components.

Shown below is a description of the information required for each item in the cost table. A Contractor must fill in all boxes in a row for each item, unless the information for a particular item requested is not applicable. A contractor who does not fill in boxes where the information is applicable will be considered unresponsive to the requirements of this RFP. Note: A Contractor does not need to fill in any box already labeled N/A (Not Applicable):

- (1) Itemize all components with an **item** number

- 
- (2) **List and describe** in non-technical terms all items required to complete the sample installation described above. For each item listed provide the manufactures **Name and Model and/or Model**. Note where the item is found on the MSRP by section/page and/or item number number. Optional items the Contractor wishes to provide on the Contract are to be provided separately from the Cost Tables. Optional items are to be presented as MSRP and/or commercial price lists with the other MSRP lists.
- (3) For port cards indicate how many **ports per card**.
- (4) For each item listed provide the **part and/or version number**.
- (5) For each item listed provide the **per each price**. This is the net price to the State, less any installation, maintenance, or labor charges. The MSRP price is not to be inserted here.
- (6) For each item listed (required or optional) provide the **one time installation cost for each**. This fee shall include all costs of the physical on-site installation by personnel such as a technician, a programmer, a cabler, etc. Note: Installation cost for adding additional items to an existing system in the future shall be the time spent on site installing the item at the hourly rate quoted in the cost table for moves, adds and changes, plus the per item installation price.
- (7) For each item listed (required or optional) provide the **monthly price to maintain each item for years 2-5** (Year 1 is the warranty period). Various maintenance plans are desired and requested; however, for evaluation purposes maintenance shall cover labor only during years 2-5. Parts will be purchased on an as-needed basis at the cost listed in the price list. Note: New parts added to an existing system will have a one year warranty, after which time the monthly maintenance cost for that item may added to any existing maintenance agreement for a particular location. No estimated escalation of pricing is required. See Price Escalations and Declines above.
- (8) Quote the hourly labor rates by personnel classification needed to accomplish a complete sample system. Quote the the number of hours each classification will work through completion of the system. Multiply the number of hours times the hourly rates to render a total labor cost. Hourly costs do not include the time for personnel directly associated with the installation of equipment. Installation fee is quoted per #6 above.
- (9) For each item **required** for the sample installation, show the **quantity** needed.
- (10) **Total five-year cost** = (Quantity X Price) + (Quantity X Install) + (Quantity X Maint Years 2-5)
- (11) **Total for Cost Table per geographic region** = Total five-year cost for every item and service listed. Note that the total must represent a turn-key system.
- (12) Name all MSRP lists, categories of product and discount for each offered for this contract. These lists and discounts shall constitute all prices for this Agreement as stated above under B, Pricing.





## FIVE (5) POSITION SAMPLE INSTALLATION - - -GEOGRAPHIC AREA \_\_\_\_\_

NOTES	1	2	3	4	5	6	7	8	9
	Item	Description must include Make and Model #	Ports per Card	Part#	Unit Price	Install Price	Monthly Maint Years 2-5	Quantity	TOTAL FIVE-YEAR COST
INTELLIGENT									\$
WORKSTATION									\$
AND									\$
ASSOCIATED									\$
OPERATIONS									\$
ROOM									\$
EQUIPMENT									\$
									\$
									\$
									\$
									\$
									\$
									\$
ENHANCED									\$
911									\$
CONTROLLER									\$
AND									\$
ASSOCIATED									\$
BACKROOM									\$
EQUIPMENT									\$
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**RFP DGS-0026**

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**RFP DGS-0026**

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<b>SYSTEM ADMINISTRATOR TRAINING</b>			N/A			N/A	N/A	6	\$
<b>CALL TAKER TRAINING</b>			N/A			N/A	N/A	36	\$
<b>MOVES, ADDS, CHANGES, 4 hours per year times 5 years</b>			N/A			N/A	N/A	20	\$
					(10)	<b>COST</b>	<b>TABLE</b>	<b>TOTAL</b>	\$

Manufacturer's Price List \_\_\_\_\_ Category of Product \_\_\_\_\_ Discount \_\_\_\_\_%

Manufacturer's Price List \_\_\_\_\_ Category of Product \_\_\_\_\_ Discount \_\_\_\_\_%

Manufacturer's Price List \_\_\_\_\_ Category of Product \_\_\_\_\_ Discount \_\_\_\_\_%

Manufacturer's Price List \_\_\_\_\_ Category of Product \_\_\_\_\_ Discount \_\_\_\_\_%

Manufacturer's Price List \_\_\_\_\_ Category of Product \_\_\_\_\_ Discount \_\_\_\_\_%

STATE OF CALIFORNIA

**DISABLED VETERAN BUSINESS  
ENTERPRISE PARTICIPATION SUMMARY**

STD. 840 REVISED

**See completion instructions on reverse.**

COMPANY NAME	NATURE OF WORK	CONTRACTING WITH	TIER	CLAIMED DVBE VALUE	CERTIFICA- TION

## COMPLETION INSTRUCTIONS

THIS FORM **MUST** BE COMPLETED WHETHER THE CONTRACT GOALS ARE ACHIEVED OR A “GOOD FAITH EFFORT” IS MADE AND DOCUMENTED. IF NO PARTICIPATION IS OBTAINED, STATE “N/A” OR “NONE.” FULL AND PARTIAL GOAL ACHIEVEMENT SHOULD BE REPORTED.

**COMPANY NAME** - list the name of the company proposed for DVBE participation. If the prime contractor is a DVBE, the name **MUST** be listed for participation.

**NATURE OF WORK** - identify the proposed work to be performed by the prime contractor or subcontractors.

**CONTRACTING WITH** - list the name of the department or company with which the company listed is contracting.

**TIER** - the contracting tier should be indicated with the following level designations:

0=Prime or Joint Contractor

1=Primary Subcontractor/Supplier

2=Subcontractor/Supplier of Level 1 Subcontractor/Supplier

3=Subcontractor/Supplier of Level 2 Subcontractor/Supplier, etc.

**CLAIMED DVBE VALUE** - the total participation dollar amount claimed by a disabled veteran business enterprise (DVBE) for this bid.

Bids that submit a percentage instead of a dollar amount shall make the commitment to the amount the percentage represents of any order issued against this contract. The RFP has an evaluation amount that may be used to estimate the percentage for the system it represents. Those bids submitting a dollar amount may likewise use this evaluation amount.

**CERTIFICATION** - to obtain DVBE participation credit, the firm must be formally certified by the Office of Small and Minority Business. Check “yes” if the certification verification has been included for each firm listed for participation.